ecology and environment, inc.
160 SPEAR STREET, SAN FRANCISCO, CALIFORNIA 94105, TEL. 415/777-2811
International Specialists in the Environment

PRELIMINARY ASSESSMENT

DATE: October 28, 1987

PREPARED BY: Melanie V. Anderson, Ecology and Environment, Inc.
Julie Noffke, Ecology and Environment, Inc.

SITE: IBM Corporation
2159 South 10th Street
San Jose, CA 95112
Santa Clara County

TDD#: F9-8706-058

EPA ID#: CAD981409410

1. Initial FIT Conclusions and Recommendations for Further Action:

a) Site Description:

IBM Corporation has leased a facility in San Jose, California, since December 12, 1960. The 97,200-square-foot facility is located in an industrial area on property owned by W.L. Battaglia (see Site Location Map, Figure 1). Previous land use was for agriculture. Between December 1960 and the present, IBM has used the facility for a warehouse and for dismantling equipment. The facility consists of one main building (No. 076). IBM is listed as a generator according to the current EPA data base (1, 8, 16, 18).

Apparent Problem:

In 1982 the San Francisco Regional Water Quality Contol Board (RWQCB) instituted a program to investigate the contamination of groundwater from leaking underground tanks at facilities in the Santa Clara Valley. The facility questionnaire submitted to RWQCB by IBM in December 1983 indicated that a single underground tank was located on-site. It was described as a 500-gallon nonvaulted storage tank installed in 1965 and used for waste kerosene and freon. Because an underground tank was present, RWQCB requested that IBM conduct a Phase I investigation to determine whether the tank was leaking and contaminating soil or groundwater (1, 2). Harding Lawson Associates (HLA) conducted the investigation in November 1983. HLA installed three observation and

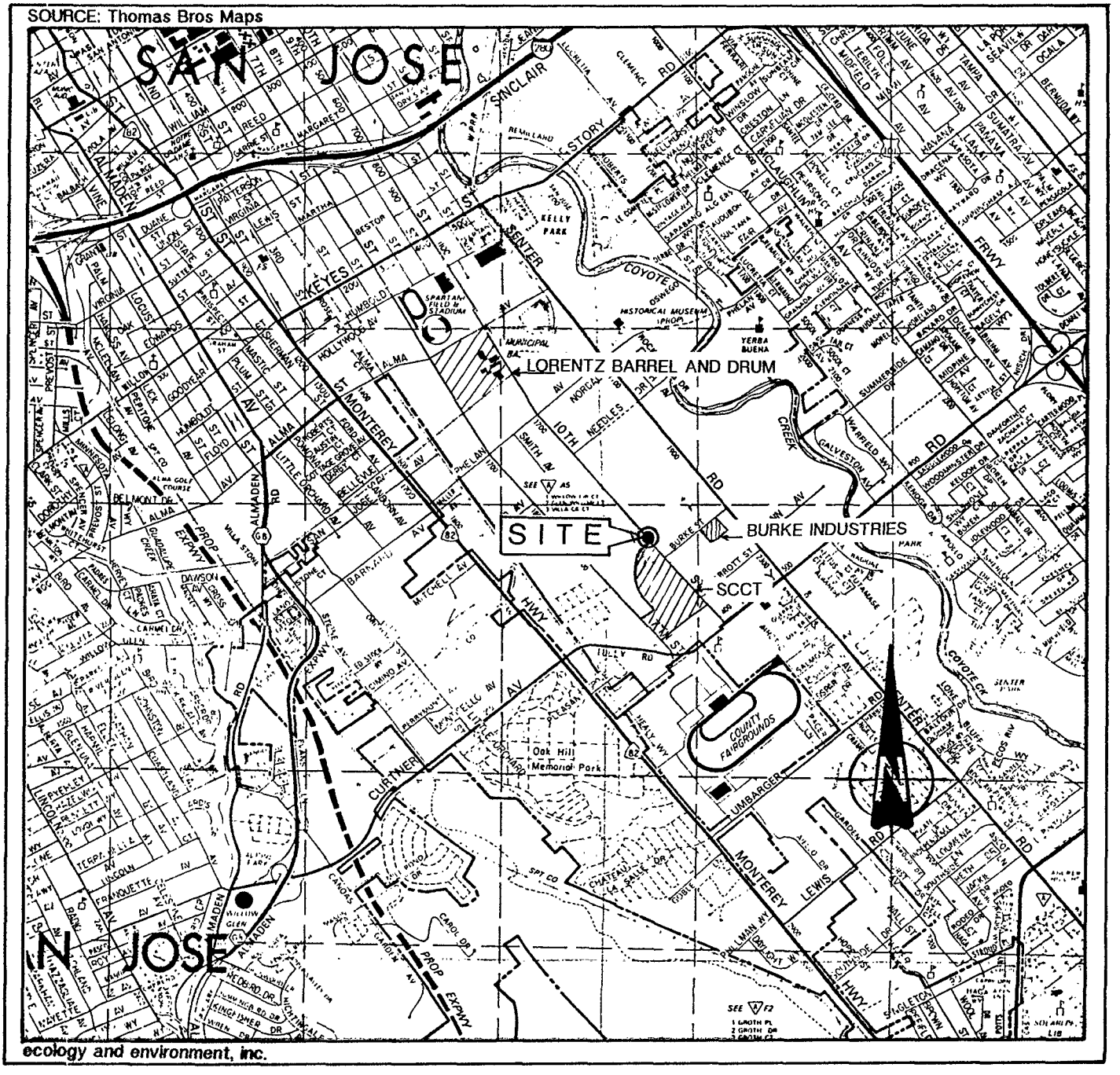

FIGURE 1
SITE LOCATION MAP

IBM CORPORATION
2159 SOUTH TENTH STREET
SAN JOSE, CA

monitor wells. Both the observation and monitor wells have screened intervals which cover the shallow groundwater aquifer (see Facility Map, Figure 2). The observation wells were constructed with 2-inch-diameter pipe, while 6-inch-diameter poly vinyl chloride (PVC) was used for the monitor wells. In addition, test borings were drilled to collect groundwater samples near the buried waste solvent storage tank. The results of groundwater analysis from observation wells and test borings are shown in Table 1.

The three monitor wells were sampled and analyzed for Freon-113, trichloroethane (TCA), diesel fuel, and kerosene on January 19, 1984 (see Table 2 for results). No contamination was detected in any of the samples (20).

IBM submitted a closure plan to the San Jose Fire Department (SJFD) for the excavation and removal of the underground tank, to be followed by soil sampling to determine whether contamination was present beneath the tank (20, 4). The waste solvent tank was removed in June 1984 by IBM and HLA (18).

During tank removal, HLA obtained five soil samples from a maximum depth of 8 feet. The soil samples were analyzed by Analytical Science Associates (ASA) for Freon-113, trichloroethylene, methyl chloride, and kerosene. No contaminants were detected in any of the samples. IBM forwarded the sampling results to SJFD. An accompanying letter indicated that closure was completed (see Table 3) (5, 6).

A site map which was prepared by HLA for the Phase I investigation indicated the presence on-site of two stripped out 500-gallon diesel storage tanks (7, 11). The IBM facility manager informed FIT that these tanks had been removed from the site in 1978 (8, 18).

b) HRS Factors:

Observed Release:

Sampling results indicate that no contamination was detected in either soil or groundwater on the site. A review of the site files from RWQCB, Department of Health Services (DOHS), and SJFD did not reveal any indications of observed releases or potential for releases.

Direct Contact/Fire and Explosion:

The EPA's Notification of Hazardous Waste Site form indicates the presence of "ignitables" on the site (9). The diesel and waste solvent tanks have been removed. The site is presently used for warehousing and disassembly of machines and does not indicate any threat to the public through direct contact or fire and explosion (8). The facility is fenced (20).

Waste Type/Quantity:

Three tanks are known to have been on-site in the past, and have since been removed, as noted above. The 1986 Notification of Hazardous Waste

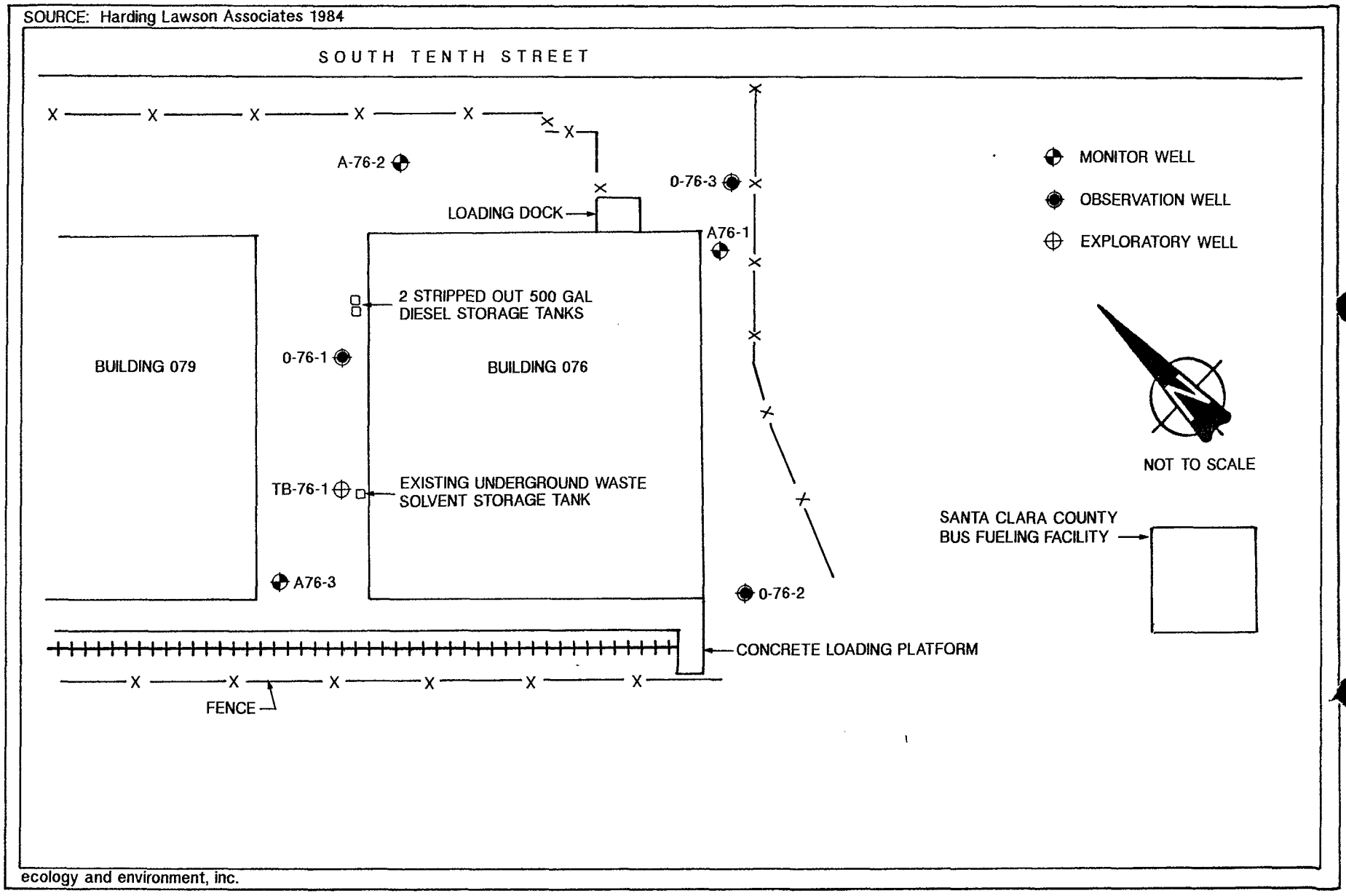

FIGURE 2
FACILITY MAP
IBM

TABLE 1

Test Boring Chemical Data*

BORING NO.	DEPTH (FT)	FREON 113	TCA	DIESEL FUEL	KEROSENE
0-76-1	40	<1	<1	<100	<100
0-76-2	35	<1	<1	<100	<100
0-76-3	32	<1	<1	<100	<100
TB-76-1	30	<1	<1	<100	<100
	35	<1	<1	<100	<100

TABLE 2

Monitoring Well Chemical Data*

WELL NO.	FREON 113	TCA	DIESEL FUEL
A-76-1	<1	<1	<100
A76-2	<1	<1	<100
A-76-3	<1	<1	<100

* All values reported as ppb; detection limit for diesel fuel and kerosene is 100ppb

Source: Su, John, IBM Corporation, letter to Donald Dalke, RWQCB, 5/1/84.
samA/ISH6/21-2

TABLE 3

Soil Analyses for IBM Solvent Tank
Building No. 076

HLA Project No. 9733,146.01

Constituent	76 East 7 feet 6/19/84	76 South 0.5 feet 6/19/84	76 East 8 feet 6/19/84	76 West 7 feet 6/19/84	76 West 8 feet 6/19/84	Detection Limit
	DEPTH IN FEET					
Freon-113 (ppb)	ND	ND	ND	ND	ND	0.10 ppb
Trichloroethylene (ppb)	ND	ND	ND	ND	ND	0.20 ppb
Methyl Chloride (ppb)	ND	ND	ND	ND	ND	1.0 ppb
Kerosene (ppm)	ND	ND	ND	ND	ND	10.0 ppb

ppm dry weight, unless otherwise notes.

ND = Not Detected.

Source: Analytical Science Associates, Inc., Emeryville, CA, 6/22/84.
Su, John, IBM Corporation, letter to Donald Dalke, RWQCB, 5/1/84.

Site form submitted to EPA by IBM lists spent halogenated solvents and ignitable hazardous waste were used on the site (9). Available file information does not include or indicate other details concerning waste types or quantities at IBM.

Groundwater:

The Santa Clara Valley is a large structural depression, filled with alluvial (stream) and lacustrine (lake) deposits. There are three groundwater subbasins in Santa Clara County: the Santa Clara, Coyote, and Llagas. The IBM site occupies the northernmost, Santa Clara, which is bounded on the north by the alluvial plains of San Mateo, South San Francisco Bay, and the Niles Cone area of Alameda. It becomes narrower to the south-southeast and eventually ends at the Coyote Narrows.

The Santa Clara subbasin consists of a "confined zone" near San Francisco Bay and a "recharge zone" in areas further from the bay. The confined zone is characterized by a thick silty clay layer 100 to 200 feet below the land surface, which separates an upper unconfined aquifer--which most of the shallow private wells use--from the deeper confined aquifer on which most of the public wells rely. The approximate eastern boundary of this confining layer (which marks the boundary between the confined and recharge zone) is 1.75 miles east of the IBM site (10).

Soils consist of silty clay, sand,and gravel. The shallowest groundwater is at 20 feet. Near IBM, the terrain is generally flat with groundwater flow direction to the east (20). Groundwater is used for municipal, domestic, industrial, and agricultural purposes. Two active San Jose Water Company (SJWC) well fields lie within a 1-mile radius of IBM. The Needles Drive station (one well) is located just north of IBM. Directly east of IBM lies the Tully Road Station well field which consists of five municipal wells. The highest well perforation for these wells is 235 feet.

Three SJWC service zones supply drinking water to the San Jose area. They are the Cambrian, Columbine, and Dow. The IBM site includes all three SJWC service zones. The total number of service connections from all three zones is 101,393. Up to 95% of drinking water supplied from the Cambrian, Columbine, and Dow service zones is from groundwater (14, 19).

Two active domestic wells (C3 and C4) lie closer than 0.5 miles north of IBM. Well No. C4 is screened at 145 feet and Well No. C3 is screened at 75 feet and produces from the shallow aquifer (14).

Net precipitation in the San Jose area is 7.3 inches from November to April (11).

Surface Water:

There are two perennial streams within a 3-mile radius of the IBM site: Coyote Creek, approximately 0.75 miles east, and the Guadalupe River, 2.6 miles west. According to the Santa Clara Valley Water District,

these surface water bodies are not used for drinking water purposes (15). The beneficial uses of San Francisco Bay include recreation, fish migration and habitat, bird habitat, industrial water supply, and aesthetic enjoyment, according to the RWQCB Basin Plan (9). The one-year, 24-hour rainfall value for the San Jose area is approximately 3 inches (12).

Federally-endangered species which may be present at or near the IBM site include the California clapper rail, salt marsh harvest mouse, peregrine falcon, brown pelican, and least tern (13).

Other Factors:

The Santa Clara County Transit Agency (SCCT) may be a potential source of groundwater contamination for IBM. Approximately 250,000 to 300,000 gallons of diesel fuel have been spilled at the SCCT site. Known components of diesel fuel--benzene, toluene, and xylene--have been detected in groundwater at SCCT. Benzene, 15 ug/l; toluene, 4.2 ug/l; and xylene, 84 ug/l, have been detected in the site's groundwater. SCCT is located upgradient, adjacent to IBM.

Other facilites, Lorentz Barrel and Drum and Burke Industries are located within a 0.75-mile radius of IBM and may be potential sources of groundwater contamination (see Site Location Map, Figure 1).

It is unlikely that IBM will score high enough for inclusion on the National Priorities List (NPL) due to a lack of documentated observed release to groundwater.

Conclusions and Recommendations:

IBM Corporation has leased a facility located at 2157 S. 10th Street, San Jose, since December 12, 1960. The EPA Cerclis files have previously listed the site address as 2159 S. 10th Street, San Jose. Three tanks are known to have been stored on-site: two 500-gallon diesel storage tanks and one 500-gallon waste solvent storage tank used for storing waste kerosene and freon. The diesel tanks were removed in 1978. IBM notified the SJFD that the underground solvent tank was removed in June 1984.

As a result of RWQCB's investigation into possible source of contamination in the area, IBM was ordered to conduct water and soil tests on-site. The results of all groundwater and soil analyses indicated no evidence of soil and groundwater contamination. Past and present use of the site has been for warehousing and for dismantling equipment. RWQCB lists the site as a "no contamination" site on the basis of sampling results. Since contamination has not been demonstrated in soil and groundwater, and all known tanks have been removed, FIT recommends no further action under CERCLA.

2. FIT Review/Concurrence:

Martha Walters 10/30/87

T/MA/IBM/PA

3. EPA Recommendation For Further Action:

4. Response Termination: No Further Action ✓ ; Active ____ .

Justification:

Three known storage tanks were stored on site. The tanks containing diesal were removed in 1978, the solvent tank was removed in 1984.

Regional Water Quality Control Board's investigation on the water & soil indicated no evidence of contamination.

Therefore EPA recommends no further action under CERCLA.

Pam Wieman
11/16/87

Concur
Paul La Courreye
11.27.87.

T/MA/IBM/PA

References

1) Assessment of Contamination from Leaks of Hazardous Materials in the Santa Clara Groundwater Basin, 205(j) Report, RWQCB et al., 7/85.

2) RWQCB 205(j) Report Appendix, Site Information, IBM Corporation, 6/85.

3) Monitor Well Chemical Data, Table 2, Attachment 5 to 205(j) Report, Appendix, IBM Corporation.

4) Closure Plan, J.P. Wilkinson, IBM, Attachment 6 to 205(j) Report Appendix, IBM Corporation, 4/24/84.

5) Letter from J.P. Wilkinson, IBM, to Joseph C. Afong, San Jose Fire Department, 7/12/84.

6) Soil analysis, solvent tank, Building 076, 6/22/84, ASA (2 Attachments to 5).

7) Site Plan, Attachment 5, pg. 2 to 205(j) Report Appendix.

8) Contact Report, Melanie V. Anderson, FIT, and Jim Dumanowski, IBM, 10/1/87.

9) EPA Notification of Hazardous Site, IBM Corporation, CAD98-145-5611, 3/25/86.

10) Groundwater and Drinking Water in the Santa Clara Valley: A White Paper, DOHS et al., 10/5/84.

11) Climatic Atlas of the United States, U.S. Department of Commerce, Environmental Science Service Administration, Environmental Data Service, 6/68.

12) Rainfall Frequency Atlas of the United States, Technical Paper No. 40, U.S. Department of Commerce, U.S. Government Printing Office, Washington, D.C., 1983.

13) Contact Report, Tom Beer, FIT, and Pete Sorensen, U.S. Fish and Wildlife Service, 5/7/87.

14) Remedial Action Alternatives Analysis for Don Pedro Chaboya Station (Table 4, Figure 6), EMCON Associates, 2/87.

15) Contact Log, Tom Beer, FIT, and Teddy Morse, Santa Clara Valley Water District, 9/23/87.

16) Contact Log, Melanie Anderson, FIT, and Joe Afong, San Jose Fire Department, 9/11/87.

17) Contact Log, Melanie Anderson, FIT, and Marcia Brooks, EPA, RCRA facilities, 9/12/87.

18) Contact Report, Julie Noffke, FIT, and John Su, IBM Corporation, 10/14/87.

19) Yoo, R., San Jose Water Company, letter to Tom Beer, FIT, 10/15/87.

20) Su, John, IBM Corporation, letter to Donald Dalke, RWQCB, 5/1/84.

PA/SI CONTACT LOG

Facility Name: IBM Corporation
Facility ID: CAD981409410

Name	Affiliation	Phone #	Date	Information
Pete Sorensen	USFWS	(916) 978-4866	5/7/87	See Contact Report.
A. Carney	DOHS	(415) 540-2043		No information in files.
Marie Thomas	RWQCB	(415) 464-1072		File information located.
Joe Afong	San Jose Fire Department, Hazrdous Materials	(408) 277-4659	9/11/87	APN Parcel #s for IBM 2157 S. 10th St. 477 27 017, 477 27 0187. Property owner is W.L. Battaglia, Trustee, P.O. Box 61890, San Jose.
Marcia Brooks	RCRA facilities, EPA	(415) 974-8958	9/12/87	CERCLA # CAD981409410 RCRA # CAD981455611 are for same facility RCRA status as Generator 1, 3/25/86.
Teddy Morse	Santa Clara Valley Water District	(408) 265-2600	9/23/87	There are two main water courses in San Jose: Coyote Creek and Guadalupe River. No drinking water is taken from the area directly.
Belinda Allen	RWQCB	(415) 464-1072	10/1/87	The site is in "inactive" status so RWQCB has no lead person assigned. Steve Morris, the Division Chief, would have the file.

T/MA/IBM/PA

PA/SI CONTACT LOG

Facility Name: IBM Corporation
Facility ID: CAD981409410

Name	Affiliation	Phone #	Date	Information
Jim Dumanowski	IBM	(408) 256-5864	10/1/87	See Contact Report.
Mark Hersch	Harding Lawson Associates, IBM Group	(415) 892-0821	10/1/87	He will check on availability of report #9733-060-01 (the 1984 Phase I investigation for IBM) and call back. He called back and referred FIT to Jim Dumanowski at IBM.
Steve Morris	RWQCB	(415) 464-0304	10/2/87	Mr. Morris verified that the site is inactive, and stated that he had no update or further information other than what we have.
John Su	IBM	(408) 256-5864	10/14/87	See Contact Report. Mr. Su will be forwarding additional information concerning site history.

T/MA/IBM/PA

CONTACT REPORT

AGENCY: IBM

ADDRESS: 5600 Cottle Road
San Jose, CA 95193

PERSON CONTACTED: Jim Dumanowski

PHONE NO.: (408) 256-5864

FROM: Melanie V. Anderson

TO: File

DATE: 10/1/87

SUBJECT: IBM Site History

His records show that facility as having the following address: 2157 South 10th Street, 2020 S. 10th Street (a RCRA site) is across and down the street.

Tanks on-site included the underground waste solvent tank which was excavated, with no contamination found underneath, and two stripped out 500-gallon diesel tanks, which were "pulled a long time ago."

The site is presently used as an equipment stripdown and warehouse facility. It is leased by IBM; he will call back with ownership and site history information.

T/MA/IBM/PA

CONTACT REPORT

AGENCY: IBM

ADDRESS: 5600 Cattle Road
San Jose, CA 95193

PERSON CONTACTED: John Su

PHONE NO.: (408) 256-5864

FROM: Julie Noffke

TO: File

DATE: 10/14/87

SUBJECT: IBM Site History

The site is 97,000 square feet and is located at 2157 South 10th Street, San Jose, California. The property owner is W. Battaglia. IBM (first occupants) have leased the facility as a warehouse since December 12, 1960.

T/MA/IBM/PA

CONTACT REPORT

AGENCY: U.S. Fish and Wildlife Service-Endangered Species

ADDRESS:

PERSON CONTACTED: Pete Sorenseni or Thomas Harvey

PHONE: 916-978-4866/415-792-0222

FROM: Tom Beer

DATE: May 7, 1987

SUBJECT: Federally-Endangered Species in the South San Francisco Bay Area

The federally endangered species and candidate species may be found as far south as the limit of tidal influence in South Bay creeks and sloughs.

Federally-Endangered Animals	Federally Endangered Plants
California Clapper Rail	None
Salt Marsh Harvest Mouse	No organized search
Peregrine Falcon	
Brown Pelican	
Least Tern	

Candidate Species	Candidate Species
Salt Marsh Yellow Throat	Point Reyes Birdsbeak
California Black Rail	Hairless Popcorn Flower
California Song Sparrow	Delta Tulip Pea